

DESCRIPTIONS OF NEW SPECIES OF *ENDODONTA* AND
FLAMMULINA FROM NEW ZEALAND.

By R. MURDOCH.

Read 11th December, 1896.

1. *ENDODONTA* (*CHAROPA*) *VORTEX*, n.sp.

Shell minute, discoidal, concave above and below, colour whitish, with a few broad streaks of pale brown at irregular distances, somewhat shining, thin and semi-transparent. Whorls 5, slowly increasing, somewhat rounded, the first three very narrow, the fourth, much larger, rising to nearly the same level as the last whorl, the last, rising abruptly from its suture, curves a little outward to its summit, from thence to the base it is regularly arcuate, where it curves in to the large umbilical crater; closely ribbed, about 19 per millimetre, ribs directed slightly forward, interstices between the ribs ornamented with fine hair-lines, varying from four to seven; sutures very deep; in the penultimate and last whorls the ribs do not extend down into the deep sutures. Spire concave to about one-third of the height, embryonic shell of one and a half whorls, shining, sculptured with very fine concentric striae. Aperture vertical, concentric, peristome straight, acute, margins convergent, columellar margin descending nearly vertically, not reflected, more widely arcuate than the upper margin. Umbilicus deep, large, nearly half the diameter, showing all the volutions. Diam. 1.6, height .75 mm.



Endodonta vortex, n.sp.

Type in my collection.

Hab.—Toko, near Stratford, North Island (R. M.).

This shell is very near to *E. subantialba*, Suter; it differs in being rather more depressed, the body-whorl not being so large in proportion to the rest of the shell, and in its coloration. From *E. Huttoni*, Suter, it may be distinguished by the gradually increasing whorls, their greater number, and the wide umbilicus.

2. ENDODONTA (CHAROPA) COMA, Gray, var. MULTICOSTATA, n. var.

Shell small, subdiscoidal, umbilicated, pale fuscous with a few pale-brown spots, dull, thin, and semi-transparent. Whorls $5\frac{1}{2}$, convex, slowly and regularly increasing, ornamented with slightly curved close ribs, about 11 per millimetre, curving slightly backward until they cross the periphery, straight on the base, interstices between the



Endodonta coma, Gray, var. *multicostata*, n.

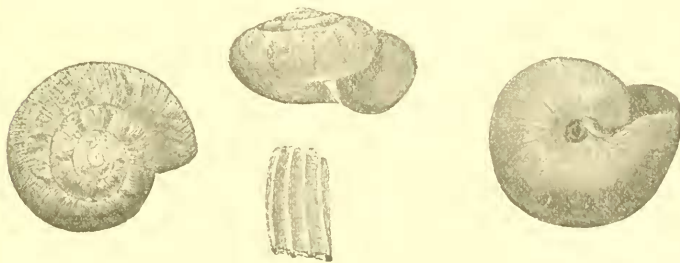
ribs ornamented with fine growth-lines. Spire a little elevated, flatly convex, embryonic shell smooth; sutures not deep. Aperture oblique, lunately rotund, peristome straight, acute; umbilicus broad, conical, nearly half the diameter, showing all the volutions; base rounded. Diam. 4.3, height 2.16 mm.

Hab.—Wanganui, North Island (R. M.).

This shell may be distinguished from *E. coma*, Gray, and *E. pseudo-coma*, Suter, by the ribs being firm and much closer together. It may prove to be a distinct species, but, with only a single dead example for comparison, it seems better to unite it with *E. coma*, to which in many respects it is closely allied.

3. FLAMMULINA (PHENACOHILIX) PERPLEXA, n. sp.

Shell globosely depressed, umbilicated, pale brown, base occasionally darker, spotted and reticulated with brown, the reticulations frequently



Flammulina perplexa, n. sp.

extending over the whole shell, most developed on the upper surface, usually a few larger spots near the sutures, dull, thin, and semi-transparent. Whorls 5, convex, gradually increasing, body-whorl

rounded, higher than broad (slightly angulated in the young), not descending, closely ribbed, about 8 ribs per millimetre, sloping slightly backward on the upper surface, a little undulating at the periphery, straight on the base, interstices between the ribs ornamented with fine hair-lines, reticulated with fine striae. Spire convex, embryonic shell smooth and shining; sutures impressed. Aperture oblique, rotundly lunate, columella descending, gradually arcuated, slightly thickened, and rather broadly dilated above, white; peristome simple, straight, margins slightly approaching. Umbilicus deep, about 1 mm. in diameter, usually whitish within the crater; base rounded. Diam. maj. 6·8, min. 5·5 mm.; height 4·5 mm.

Type in my collection.

Hab.—Wanganui, Cape Egmont, North Island (R. M.).

This shell has been confounded with *Phacusa hypopolia*, Pfr., a species which varies considerably. Mr. W. Moss has had examples compared with the type of *P. hypopolia* in the British Museum, and found they were not that species, from which it may be distinguished by the more rounded base, more dilated columella, and very different coloration. Recently I received from Mr. H. Suter examples of *P. hypopolia* from Pelorus Valley, South Island, a local variety, which in contour and coloration very closely resemble *F. perplexa*: the latter differs in the umbilicus being a little wider, the base somewhat more rounded, the body-whorl being proportionately a little greater in height to its breadth than in this variety, the aperture a little less oblique, and the shell half a whorl less. No well-marked characters separate the two forms.

4. FLAMMULINA (ALLODISCUS) MOSSI, n.sp.

Shell small, subdiscoidal, narrowly umbilicated, yellowish horny, dull, thin and semi-transparent, spotted and somewhat reticulated with rufous markings, usually a number of larger splashes near the sutures, extending to the periphery on the body-whorl, base with a few lighter-



Flammulina Mossi, n.sp.

coloured spots and streaks. Whorls 5–5½, rather convex, regularly increasing, the last not descending, rounded, closely ribbed, about 10 ribs per millimetre, sloping slightly backward on the upper surface, straight on the base; interstices between the ribs with fine growth-lines, reticulated with fine striae. Spire convex, embryonic shell smooth and shining, sutures well impressed. Aperture very oblique, lunate; columella shortly descending, arcuate, a little thickened and reflected above; peristome thin, straight, margins slightly approaching.

Umbilicus deep, narrow, about .5 mm. in diameter; base somewhat rounded, gradually impressed on approaching the umbilical crater. Diam. maj. 5, min. 4.25 mm.; height 2.8 mm.

Type in my collection.

Hab.—Wanganui, Cape Egmont, Toko near Stratford, Manawatu, North Island (R. M.).

In shell characters this species is intermediate between *Allodiscus* and *Phenacohelix*; the umbilicus and aperture agree well with the former section, whilst the ribbing and colour-markings call to mind the latter. It has been confounded with *Phenacohelix pilula*, Reeve: Mr. W. Moss has had examples compared with the type of that species in the British Museum, from which it was found to differ considerably in its smaller size, its more oblique and less broadly lunate aperture, and in its narrow umbilicus; the latter varies from .25 to .5 mm. The dentition is that of *Allodiscus*. I have much pleasure in connecting with this species the name of Mr. William Moss, of Ashton-under-Lyne, who has assisted in clearing up the position of this and the preceding species.